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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,296	08/09/2001	Yasuo Takahashi	OOCL-65 (US-P1496)	2674

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EXAMINER

TRAN, LY T

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 01/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/925,296

Applicant(s)

TAKAHASHI, YASUO

Examiner

Ly T TRAN

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 3-9, 11, 13-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Horigome et al. (USPN 5,631,677).

With respect to claims 1 and 11, Horigome et al discloses a printer comprising:

- ✓ • A printing section for performing printing on paper (Column 5: line 32-35)
- ✓ • A paper feed section for transferring paper, which is fed from a paper feed cassette, to said printing section (Column 5: line 40)
- ✓ • A battery power source, a remaining-battery-capacity detector for detecting a remaining-battery-capacity level of said battery power source (Column 8: line 5-7)
- A print-operation-commencement specifying section for specifying print-operation commencement; and control section for performing print-operation control (Column 6: line 32-35),
- Control section performs the print-operation control such that the remaining-battery-capacity detector is used to detect the remaining battery capacity level immediately before a paper-feed operation is commenced

for the first sheet of the paper for a print operation which is commenced corresponding to a print-operation commencement specification received from the print-operation commencement specifying section; and the control section performs the print-operation control such that when printing is consecutively performed on a plurality of sheets of the paper corresponding to print-operation commencement specification, the remaining-battery-capacity detector is used to detect the remaining battery capacity level immediately before the paper-feed operation is performed for the print operation for each of the plurality of sheets of the paper. (Column 6: line 36-53).

With respect to claims 3- 4 and 13-14, Horigome et al. discloses a determination section for determining whether a paper-transfer operation and the print operation to be performed subsequent to the detecting operation for the remaining battery capacity level can be completed for at least one sheet of the paper according to the remaining battery capacity level detected by said remaining-battery-capacity detector and determination section determines the remaining battery capacity level detected by said remaining-battery-capacity detector to be insufficient to complete the paper-transfer operation and the print operation, which are performed subsequent to the detecting operation for the remaining battery capacity level, for at least one sheet of the paper, control is performed not to commence the paper-transfer operation (Column 11: line 65-67, Column 12: line 1-5).

With respect to claims 5 and 15, Horigome et al. discloses determination section determines the remaining battery capacity level detected by said remaining-battery-capacity detector to be insufficient to complete the paper-transfer operation and the print operation, which are performed subsequent to the detecting operation for the remaining battery capacity level, for at least one sheet of the paper, a display unit displays information indicating that the remaining battery capacity is short (Column 12: line 2-5, line 65-67).

With respect to claims 6-8 and 16-18, Horigome et al discloses plurality of sheets of the paper corresponding to a specification received from said print-operation commencement specifying section, the determination section determines whether the transfer operations and the print operations can be completed all for the specified plurality of sheets of the paper according to the remaining battery capacity level detected by the remaining-battery-capacity detector, determination section determines the remaining battery capacity level detected by the remaining-battery-capacity detector to be sufficient only to complete the paper-transfer operations and the print operations for partial number of sheets of the paper in the paper-transfer operations and the print operations for the specified plurality of sheets of the paper, the display unit displays information indicating that printing can be performed only for the partial number of sheets of the paper and display unit displays a number of printable sheets of the paper for the information indicating that printing can be performed only for the partial number of sheets of the paper (Column 12: line 1-28)

With respect to claims 9 and 19, Horigome discloses the remaining-battery-capacity detector detects the remaining battery capacity level also when the printer is powered on (Column 6: line 36-38 discloses detecting the battery at all time therefore the battery is detected when the power is on).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horigome et al. (USPN 5,631,677) in view of Arakawa et al. (USPN 6,067,101).

Horigome et al. fails to teach a battery power source that is connected to a main unit of the printer to be removable.

Arakawa et al. teaches a battery power source that is connected to a main unit of the printer to be removable (Column 18: line 31-38).

It would have been obvious to one having ordinary skill in the art at the time the invention was made with a battery power source that is connected to a main unit of the printer to be removable as taught by Arakawa et al. The motivation of doing so is in order to replace the battery when necessary.

3. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horigome et al. (USPN 5,631,677) in view of Shimoda (USPN 6,247,777).

Horigome et al teaches detection operation for the remaining battery capacity level, can be completed for at least one sheet of the paper (Column 12: line 1-5).

However, Horigome et al. fails to teach detect the temperature in a peripheral environment of the battery power source, wherein a determination criterion used in the determination section is changed according to the detection result of the temperature detector, the determination criterion being used to determine whether the paper-transfer operation and the print operation.

Shimoda teaches detect the temperature in a peripheral environment of the battery power source, wherein a determination criterion used in the determination section is changed according to the detection result of the temperature detector, the determination criterion being used to determine whether the paper-transfer operation and the print operation (Column 4: line 34-43).

It would have been obvious to one having ordinary skill in the art at the time the invention was made with detect the temperature as taught by Shimoda. The motivation of doing so is in order to keep the user from dangerous temperature (Shimoda USPN 6,247,777, Column 3: line 10-14).

#### ***Response to Arguments***

4. Applicant's arguments filed 11/27/02 have been fully considered but they are not persuasive.

Applicant's argument that Horigome does not disclose a remaining-battery-capacity detector is used to detect a remaining-battery-capacity level immediately before a paper transfer operation is commenced for the first sheet of the paper for a print operation for each of the plurality of sheets of the paper is not persuasive because refer to column 5; line 40, Horigome discloses a paper feed unit 34 and refer to column 6; line 36-40, Horigome discloses to monitor the battery capacity at all the time during printing operation, so by monitor the battery capacity at all time, it should monitor or detect immediately before each paper is transferred. Therefore, Horigome meets the limitation of the claim.

With regarding to claim 2, Applicant's notes that the Examiner did not address this claim in the 102 rejection, it was a typo error. The Applicant did recognize that the Examiner intended to reject this claim under 35 U.S.C 103 as clearly show in previous Office Action on page 5.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of



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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T TRAN whose telephone number is 703-308-0752.

The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 703-308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0967.



January 15, 2003



ANH T.N. VO  
PRIMARY EXAMINER

1/16/03